

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FCC MAIL SECTION

DA 96-1920

Nov 21 10 02 AM '96

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In the Matter of)

)
Amendment of Part 25 of the Commission's)
Rules to Establish Rules and Policies)
Pertaining to the Second Processing Round)
of the Non-Voice, Non-Geostationary)
Mobile Satellite Service)

IB Docket No. 96-220

ERRATUM

Released: November 18, 1996

1. This Erratum corrects the *Notice of Proposed Rulemaking* in the above captioned proceeding, FCC 96-426 released October 29, 1996, concerning the licensing of second round applicants for non-voice non-geostationary mobile satellite service. After the release of the *Notice*, the National Oceanic and Atmospheric Administration informed the Commission of corrections to its systems specifications.

The second sentence of paragraph 50 is revised and paragraph 50 now reads as follows:

50. Furthermore, NOAA has an agreement with the European Meteorological Satellite Organization ("Eumetsat") for the operation of a polar orbiting meteorological satellite in conjunction with NOAA's system in the 137-138 MHz band. The Eumetsat satellite may begin operations at 137.025-137.175 MHz and 137.825-138 MHz as early as 2002. In addition, DoD is expected to merge its system which will operate in the 400.15-401.0 MHz frequency band with NOAA's system. Beginning in 1998, NOAA will be responsible for "on orbit" operations of the DoD metsat satellites, and NOAA will assume all command and control functions for the DoD system by 2007. Our use of the terms "NOAA" and "DOD" in this Notice incorporates the separate systems operated by NOAA and DoD as well as the systems resulting from agreements with Eumetsat and the merger of the NOAA and DoD systems.

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Paragraph 52 is revised to read as follows:

52. With respect to our proposed downlink band, Footnote US318 of the Table of Frequency Allocations, 47 C.F.R. § 2.106, reserves the 137.333-137.367 MHz, 137.485-137.515 MHz, 137.605-137.635 MHz, and 137.753-137.787 MHz sub-bands ("NOAA channels") for use by Government satellite operations on a primary basis. Non-Government MSS use in these

NOAA channels is secondary until January 2000. After that date, Government and non-Government use of the NOAA channels will be on a co-primary basis. The NOAA channels are currently used by NOAA for a two satellite MetSat system. The 137.025-137.175 MHz and 137.825-138 MHz sub-bands ("NOAA bands") are allocated to MSS on a secondary basis⁴² and are not currently being used by Government satellite systems.⁴³ NOAA's system currently is composed of two satellites but, for a period of time, could consist of up to five satellites.⁴⁴ Our understanding is that NOAA plans to implement MetSat operations in the NOAA bands, launching one satellite in 2003 and a second satellite in 2007. Eumetsat, the European metsat operator, will launch the first of a series of satellites known as METOP in 2002 using the NOAA bands. Beginning in about 2010, these Eumetsat satellites will be integrated with NOAA's converged system in the 137-138 MHz band known as the National Polar-orbiting Operational Satellite System ("NPOESS"). NOAA is expected to launch a new satellite in the NOAA channels in August 1997 and continue to operate its existing two satellites in the NOAA channels. If any function of one of the three NOAA satellites in the NOAA channels fails, NOAA will launch an additional satellite in the NOAA channels as early as 1999. If any function of a second satellite operating in the NOAA channels fails, NOAA will launch a second satellite in the NOAA channels in 2001. NOAA expects to operate all satellites until they become inoperable. Therefore, for a period of time, NOAA may operate up to five satellites in the NOAA channels.

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The fourth sentence of paragraph 53 is revised and paragraph 53 now reads as follows:

53. Furthermore, NOAA and Orbcomm have been coordinating Orbcomm's use of the 137-138 MHz band. In order to ensure that Orbcomm does not cause interference to the NOAA system when it begins operation in the 137.025-137.175 MHz band-edge sub-band,⁴⁵ Orbcomm will have to migrate some of its operations from the 137.1850-137.2375 sub-bands to as many as two of the NOAA channels, specifically the 137.485-137.515 MHz and 137.605-137.635 MHz channels. Thus, any proposals by the second round applicants to use the 137-138 band should contemplate the use of as few as two of the NOAA channels, specifically the 137.333-137.367 MHz and 137.753-137.787 MHz channels. Two channels coupled with the use of the band edge may be sufficient spectrum for a Little LEO system to operate. However, we do ask for comments on whether this spectrum is sufficient to support a system.

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The first sentence is revised and a new second sentence is added to paragraph 54 and paragraph 54 now reads as follows:

54. Consequently, a Little LEO system would have use of the NOAA bands until the year 2002 and time-shared use of the NOAA bands thereafter. A Little LEO system would have time-shared use of the NOAA channels until the NOAA satellites become inoperable. When NOAA's satellites in the NOAA channels become inoperable, the Little LEO licensee could use the channels on a primary, full-time basis. Further, subject to coordination with the Executive Branch, specifically NTIA and NOAA, a Little LEO system could continue to time-share the NOAA bands with NOAA satellites on a secondary basis.⁴⁶

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The first, second, and third sentences in paragraph 55 is revised and paragraph 55 now reads as follows:

55. The implementation of NOAA's system in the NOAA bands could work as follows: Little LEO System-2 could begin operating in the NOAA bands and work with NOAA to migrate Little LEO service to the NOAA channels. Little LEO System-2 would continue to time-share the available NOAA channels until NOAA's satellites become inoperable. We anticipate the Little LEO System-2 licensee would be able to use the NOAA channels for 84.5 percent of the time when NOAA is operating three satellites in the NOAA channels.⁴⁷ However, during NOAA's implementation of its satellites in the NOAA bands, Little LEO System-2 would have to time-share both the NOAA channels and bands with NOAA's system. During this period, the Little LEO system would operate on a secondary basis to NOAA's system in the NOAA bands. We calculate that the licensee would be able to use the NOAA bands for 84.5 percent of the time.⁴⁸ Once NOAA has vacated the channels and implemented its system at the band-edge, the Little LEO licensee could continue to time-share and operate on a secondary basis to NOAA in the NOAA bands.⁴⁹ However, a Little LEO licensee would have primary use of the NOAA channels when NOAA's satellites become inoperable.

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The fifth sentence of paragraph 65 is revised and paragraph 65 now reads as follows:

65. In order to facilitate interference-free operations, prior to the launch and operation of a licensed system, we propose to require that the Little LEO licensee successfully coordinate its system with NOAA. In addition, we request comment on our proposed sharing and migration scenario between Little LEO System-2 and the MetSats. Parties should specifically address how the NOAA channels and the band-edge sub-bands can be used most effectively by a new Little LEO entrant or entrants. We ask interested parties to include detailed discussion of their technical plans sufficient to demonstrate that there will be no unacceptable interference to the NOAA system operating in the 137-138 MHz band. We ask parties to comment on how sharing with a NOAA system consisting of up to five satellites operating in the NOAA channels or up to five satellites operating in a combination of both bands and channels (e.g., two satellites using the channels and three satellites using the bands) can be accomplished in the 137-138 MHz band. Specifically, parties should address whether time-sharing of frequency blocks is feasible (e.g., how time should be restricted, the effect on service to consumers, the impact on interference), and if so, how these blocks should be licensed. Further, parties should address whether more than one entrant's downlinks can be accommodated in this band.

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Footnote 45 is revised to read as follows:

Space operation, meteorological satellite, space research, and mobile satellite service systems can all operate on a primary basis in the 137.0-137.025 MHz frequency segment. See 47 C.F.R. §

2.106.

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Footnote 47 is revised to read as follows:

This calculation is based on the operation of three satellites by NOAA with an earth station having an elevation angle towards the satellite of zero degrees and for a user located in the Washington, D.C. area. Currently NOAA's two satellites are phased in the orbital planes and each utilizes two of the four channels to provide meteorological satellite service.

As stated previously, the availability of the satellite to the user is, in part, a function of the location of the user. For example, NOAA's three satellites will be available to its users located at latitudes of 0, 30, and 60, degrees for 11.5, 13.6, and 26.3 percent of the time, respectively. For calculations based on the operation of the four satellites, see paragraph 70.

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The second and third sentence is deleted from Footnote 48 and Footnote 48 is revised to read as follows:

This calculation is based on the operation of three satellites by NOAA with an elevation angle of zero degrees. As previously stated, the Little LEO licensee will need to coordinate its system with other users of the NOAA bands. Other administrations plan to use the NOAA bands and this may affect the time available for use by a Little LEO system.

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Footnote 49 is deleted.

FEDERAL COMMUNICATIONS COMMISSION



Donald H. Gips
Chief
International Bureau